



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,957	02/27/2004	Bryan D. Simmons	31849.48	6672
46334	7590	03/17/2006	EXAMINER	
HAYNES AND BOONE, LLP 901 MAIN ST SUITE 3100 DALLAS, TX 75202				KIM, JOHN
		ART UNIT		PAPER NUMBER
		3733		
DATE MAILED: 03/17/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/788,957	SIMMONS, BRYAN D.
Examiner	Art Unit	
John Kim	3733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-28 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 2/27/04 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date: _____
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>8/2/04</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

Oath/Declaration

The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not identify the citizenship of each inventor.

Specification

The disclosure is objected to because of the following informalities: on page 4 of the specification, there are some typos in paragraph 9. For example "dissection tool."

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

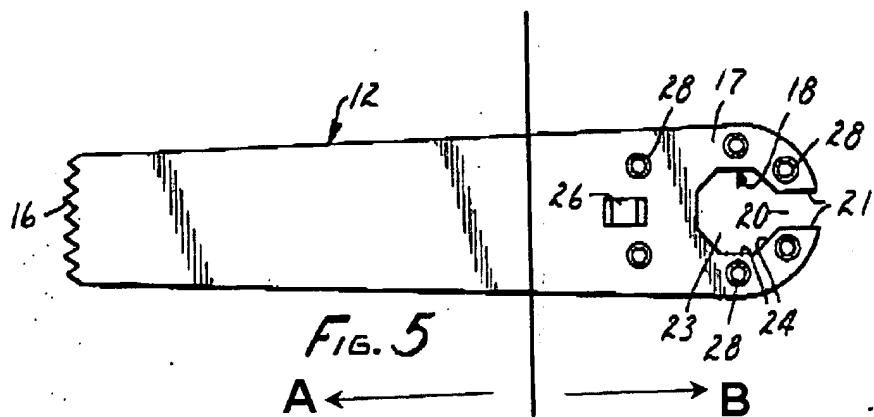
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 10-11, 14 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Mongeon (US Pat 4386609).

Mongeon teaches of having a surgical instrument with a motor (drive mechanism), a collet (10) with engaging members (44), and dissection tool with a tool

body (A, see modified figure below) and a hub (B, see below) with indentations (28).

Mongeon also teaches of having a housing (14) and the dissection tool is a relatively flat reciprocating saw blade (figure 1 and 5). In regards to claim 10 and 11, Mongeon teaches of having a collet assembly with a plunger (46) and a compression device (coil spring, 50) (col 3:22-57). The tool body and hub are made of metal and is a single monolith structure (claims 14 and 15).



Claims 16-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Raitt et al. (US Pat 5554165, in IDS).

In regards to claim 16, Raitt teaches of having a bone saw blade (10), a collet assembly (30), a flat extending member (10), a cutting surface (12), a hub (16) with engagement locations (26) for engagement members (34). As seen in figure 1, Raitt teaches of having a surrounded opening that is circular, and a portion of the flat extending member extending around the opening (claims 17 and 19). As seen in figure 2, Raitt teaches of having indentations (26) that receive protrusions (34). (claim 18) In

regards to claim 20, Raitt teaches of having the protrusions engage the indentations (including the two sub-indentations (26' and 26'')) for the blade to frictionally engage the collet assembly (col 3:22-39). In regards to claims 21 and 22, Raitt teaches the hub and tool body can be attached by resistance welding, formed together, or molded thereto (col 2:56-59), thus making a single monolithic structure.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 5, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mongeon (US Pat 4386609) in view of Bourke (US Pat 5755293).

As discussed above, Mongeon teaches of having a surgical instrument but fails to have an electrical motor with a spindle, and eccentric flywheel, and a drive member connected to the shaft, which is connected to the flywheel. Bourke teaches of having a drill/saw with an electric motor (col 1: 15-23), a spindle (50), a flywheel (82), a drive member (69) and a shaft (78) (col 8:6 – 9:28). This allows the motor to provide oscillating motion to drive the saw blade. Thus it would have been obvious to one skill in the art at the time the invention was made to construct the surgical instrument of Mongeon with an electric motor, a spindle, a flywheel, a drive member and a shaft in view of Bourke to provide oscillating motion to the saw blade.

Claims 7, 8, 9, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mongeon (US Pat 4386609) in view of Raitt et al. (US Pat 5554165, in IDS).

Mongeon teaches of having a surgical instrument with a non-circular opening but fails to have a circular aperture on the hub, a portion of the tool body extends around the opening, and indentations with a protrusion for engaging members. Raitt teaches of having a circular aperture (16), a portion of the tool body extending around the opening (see figure 2, 14), and indentations (26) for engaging members (34) (col 2:54-3:22). This allows a stronger connection between the motor and blade. Thus it would have been obvious to one skill in the art at the time the invention was made to construct the surgical instrument of Mongeon with a circular aperture on the hub, a portion of the tool body extending around the opening, and indentations with a protrusion for engaging members in view of Raitt, which allows a stronger connection between the motor and blade.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mongeon (US Pat 4386609) in view of Trott (US Pat 5839196).

Mongeon teaches of having a surgical instrument but fails to teach of using balls as engaging members. Trott teaches of using balls (128) as the engaging members (col 7:8-57). This allows ease of use when inserting and removing the blade while maintaining a sturdy connection. Thus it would have been obvious to one skill in the art

at the time the invention was made to construct the surgical instrument of Mongeon using balls as engaging members in view of Trott in order to allow ease of using the instrument with removable blades but allows a sturdy connection.

Claims 23, 24, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mongeon (US Pat 4386609) in view of Bourke (US Pat 5755293).

Mongeon teaches of having a coupling assembly with a plunger (46) configured to move engagement members (44) from first and second positions (figures 2 and 3), which secures the dissection tool (12) to the collet (10). Mongeon further teaches of having the engagement members and plunger inside the opening of the dissection tool (see figures 2 and 3), with a compression device (50), and the dissection tool is a bone saw (abstract). Mongeon also teaches of having a post (56) engaged with a compression device (50). Mongeon fails to teach of having a translation member connected to a body portion. Bourke teaches of having a motor connected to a translation member (50, 82, 79) connected to a body portion (69). This allows the motor to move the saw blade in oscillation. Thus it would have been obvious to one skill in the art at the time the invention was made to construct the surgical instrument of Mongeon with a translation member connected to a body portion in view of Bourke in order to provide the instrument with an oscillation movement of the saw blade.

Claims 25, 27, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mongeon (US Pat 4386609) in view of Bourke (US Pat 5755293) as applied to claim 23 above, and further in view of Trott (US Pat 5839196).

The combination of Mongeon and Bourke discloses the claimed invention except for having spherical shaped engagement members. Trott teaches of having spherical shaped engagement members (128) and a ball bearing assembly (figure 11 and 12). This allows ease of use when inserting and removing the blade while maintaining a sturdy connection. Thus, it would have been obvious to one skill in the art at the time the invention was made to construct the combination of Mongeon as modified by Bourke, including spherical shaped engagement members and a ball bearing assembly in view of Trott, in order to allow ease of using the instrument with removable blades but allows a sturdy connection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892 for art cited of interest.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Kim whose telephone number is (571) 272-2817. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached on (571) 272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JK

EDUARDO C. ROBERT
SUPERVISORY PATENT EXAMINER